

35

denoise

Wavelet Transformation

Noise Profile

Apply Noise Profile to each Stage

. . .

Generate Sparse Data Set

Shift Signal

Generate Peak-Free Signal

Generate Baseline

Subtract Baseline From Signal

الم الم

COMPRESSION

Mass Shift

Find width of Strongest Peak

Delete an Area Around Each Peak

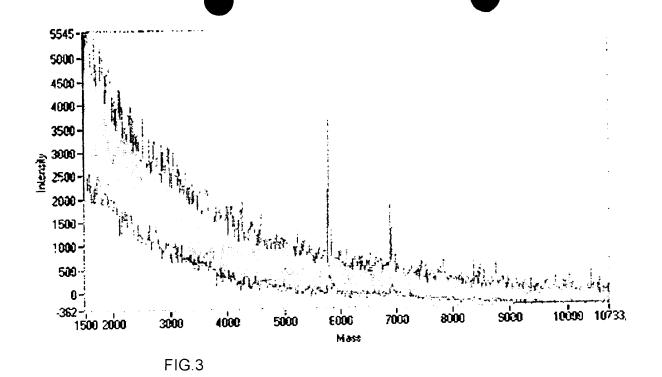
Generate a Residual Baseline

Subtract Residual Baseline From Signal

Determine Height of Each Peak

GENOTYPE

Determine Peak Probabilities



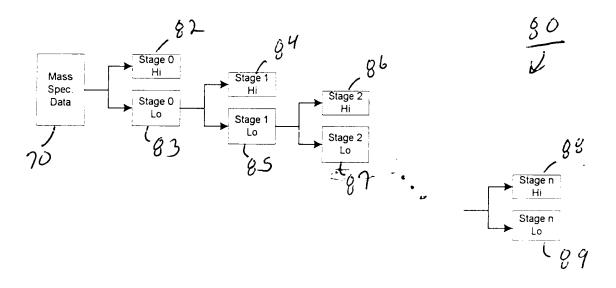


FIG. 4

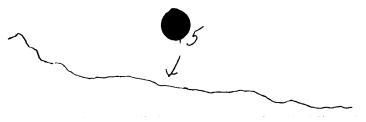


FIG. 5

FIG. 6

Exp fitting $a_0 + a_1 \exp^{-}(a_2 m)$

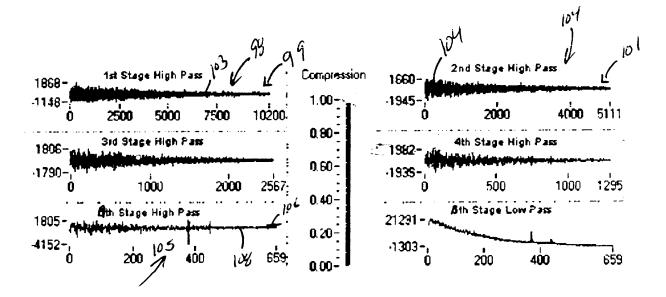
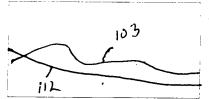


FIG. 7

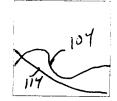
Stage 0 - Hi

Threshold 0=4XNoiseProfile



Stage 1 - Hi

Threshold 1=2XNoiseProfile



Stage 2 - Hi

Threshold 2=1XNoiseProfile



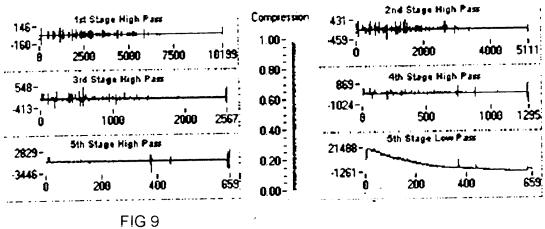
Stage n - Hi

Threshold $n=(1/2^{n-2})XNoiseProfile$

Stage n - Lo







Signal (t)=
$$\frac{(\text{Start O(t)} + \text{Start 1(t)} + \text{Start 2 (t)}... + \text{Start 23 (t)})}{24}$$

FIG. 10 - SHIFT SIGNAL TO ACCOUNT FOR VARIATIONS DUE TO STARTING POINT

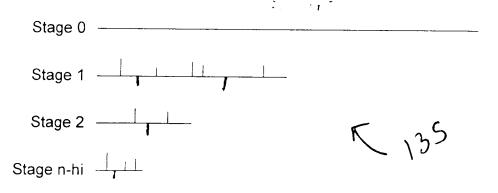


FIG. 11

47.34

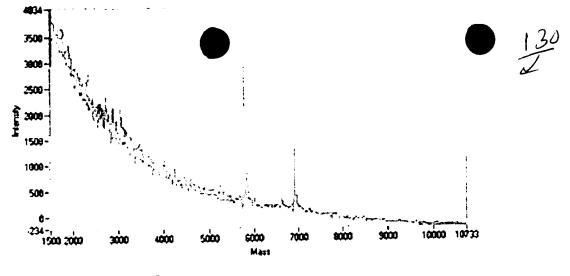


FIG 12

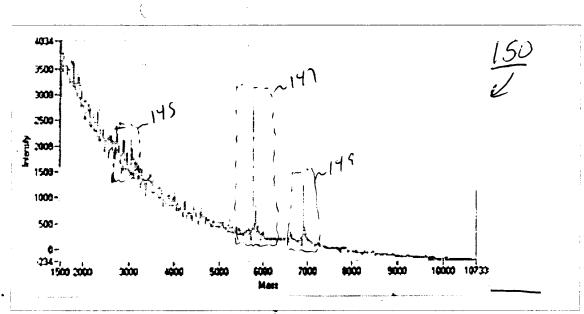


FIG. 13 - TAKE A MOVING AVERAGE, REMOVE SECTIONS EXCEDING A THRESHOLD

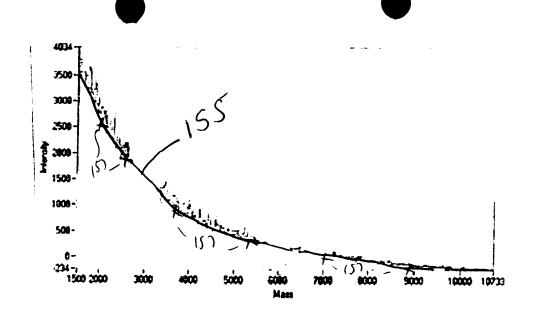


FIG. 14 - FIND MINIMA IN REMAINING SIGNALS AND CONNECT TO FORM A PEAK FREE SIGNAL

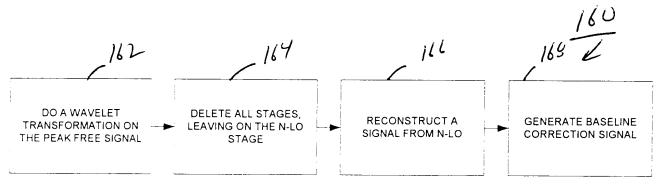


FIG. 15 - GENERATE BASELINE CORRECTION

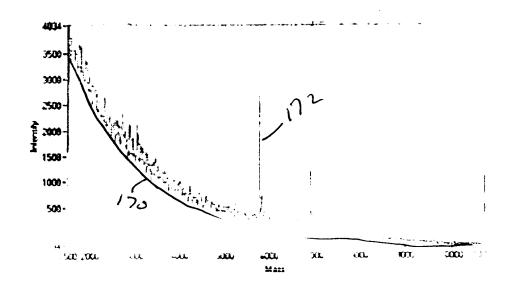


FIG. 16

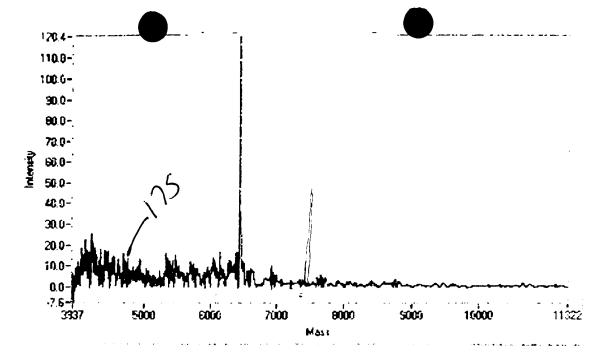


FIG. 17

		BY			ts	g b	100
	NON-0	VALUE.	124	188	L	150	1951
•	COEFFICIENTS	VALUE	$\int_{\mathcal{L}}$	INTE	RMEDIAT	<u>E</u> / _	RELATIVE
187	100	25		ϑ	100.025	P	100.025
, A	150	220			150.220		50.220
	500	.1			500.0001		350.0001
	10,050	800		10,	,050.8		9550.8
	10,075	890		10,	075.89		25.89
	11,125	910		11,	125.91		150.91
	12,100	1000 (MA	X)	12,	100.9999	9	975.99999
	13,250	940		13,	250.94		1150.94

FIG. 18

201	RECEIVE DATA FILE	
202	ARRANGE AN X-Y ARRAY OF COEFFICIENTS	
203	▼ DETERMINE STARTING POINT AND MAXIMUM DATA VALUE	
204	GENERATE INTERMEDIATE REAL NUMBER	Whole Portion is X axis number Decimal Portion is fractional Data Value
205	CALCULATE COMPRESSED VALUE	

FIG. 19

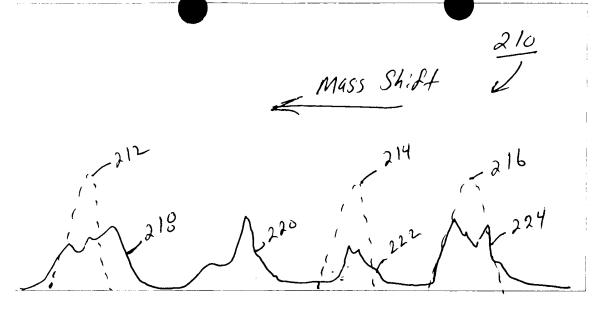


FIG. 20

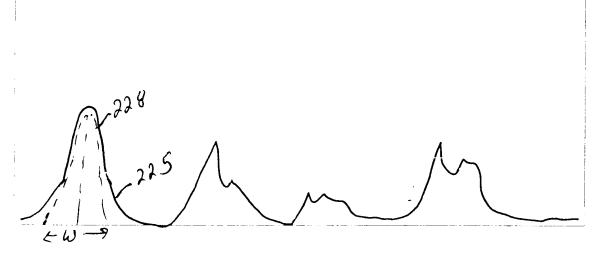
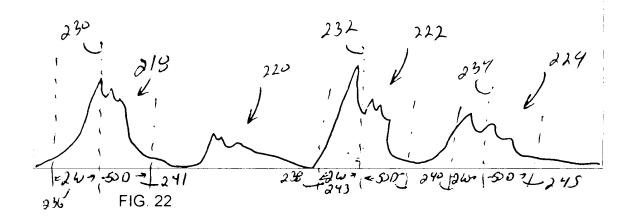


FIG. 21



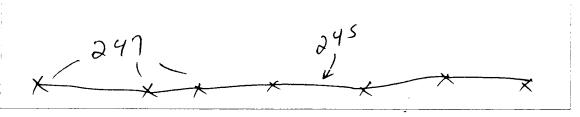


FIG. 23

M M 255

FIG. 25

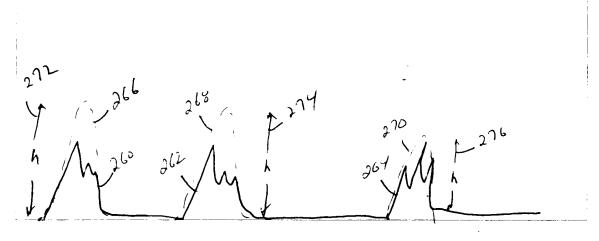


FIG. 26

FIG. 27

